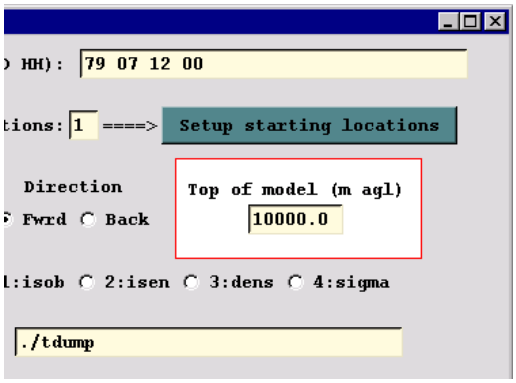
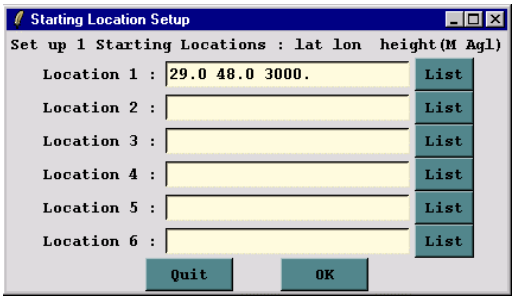
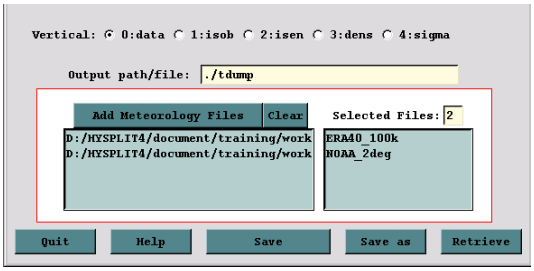
Trajectory Model Configuration

The setup menu has several options that control the computation. Usually they should be left at their default values. For instance, computations should use the vertical motion field (Data) contained within the data file. Only under special situations, such as the previous example, should other methods be selected. Some of these options will be explored in more detail later. The "top of the model" is the height above which the meteorological data are not processed. For calculations within the troposphere, 10 km is a good top. Trajectories are terminated when they reach this height. Processing fewer levels reduces computational times. A starting location can be entered directly from the "starting locations" menu or a position may be chosen from a predefined "list". This list is user editable "plants.txt" file. For this example, select a height of 3 km near Kuwait.





One key feature is for any simulation is selecting the best meteorological data files. In the current compiled version up to 12 files may be defined simultaneously. When multiple files are defined, at each integration step, the model finds the finest spatial resolution file at the location and time of the trajectory end-point. Execution of the control file for this case results in a trajectory that goes south.



The meteorological file indicator is written with each end-point position in the second column of the ASCII trajectory output file. The diagnostic MESSAGE file also provides additional detail about the calculation. In this example the switch from ECMX to CDC1 occurs at 1500 GMT, causing the 1200 and 1800 GMT data to be reloaded.

Previous Page	Next Page